Hand Held Ground Penetrating Radar (HH-GPR)

Electronics and Radar Development Establishment (LRDE), a premier lab under DRDO has developed state-of-art Radar systems and associated Technologies. LRDE is seeking Expression of Interest (EoI) from prospective bidders/recipient for Transfer of Technology in the area of Radars.

Presently, LRDE is ready for ToT for the "Hand Held Ground Penetrating Radar (HH-GPR)". Prospective bidders for EoI are advised to refer the Transfer of Technology link on the DRDO website, www.drdo.gov.in for further details/description of the system.

The terms and conditions to be complied by the bidders for receipt of technology are available in the document, "Guidelines for Transfer of Technology" published in the Transfer of Technology link on the website, www.drdo.gov.in.

1. Description of Technology:

Handheld Ground Penetrating Radar (HH-GPR) System is used in detection of Anti-Tank Mines, Anti-Personnel Landmines (metallic and non-metallic) and Improvised Explosive Devices (IED) in a variety of Indian soils such as Sand, Red, Laterite, and Black Cotton. Ground Estimation, Clutter Suppression, Detection of buried objects and Classification, Presentation by audio alarm and/or visual display are the key features of the system. Operational environment of GPR are in in-accessible areas such as, jungles and non-motorable paths/roads. Therefore low power consumption and light weight are key parameters of the system. Ease of operating the system, interpretation of the results in a manner that assists the operator for evasive/corrective action are the important features of the system. The system provides indication of target/anomaly below the soil by means of an audio signal presented on headphone and/or a visual display in 2D.

Hand held GPR is configured on a 1.6 meter collapsible wand. Wand is adjustable for easy operation by the operator in kneeling and lying on the ground positions. Antenna is at the end of the wand that is in proximity to the ground. Electronics comprising of RF sub system, Signal Data and Image processing card is housed in an electronic box and is fixed at the other end of wand. Human Machine Interface and optional Display are mounted on the handle for 2D presentation of the target details. This battery operated system is extremely useful for quick detection and demining operation for Army and Para-military forces respectively in jungle area where very narrow pathways exists.



Hand Held GPR

2. Application Areas:

The Radar has applications in the area of detection of buried objects such as mines, explosives or concealed objects in the soil.

Interested Industries may submit their company profile, financial &technical Capabilities etc. as per the EOI terms (Refer Appendix-G) in 'Guidelines for ToT' document) to Director, LRDE, Bengaluru and copy to Director DI²TM on the following addresses within 45 days of this advertisement.

Director, LRDE

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